

12. Write a program that reads a day of the week and then outputs the following:

- (a) the first three letters of the day
- (b) the letters in uppercase
- (c) a numerical value of the day (Sunday → 0, Monday → 1, etc.)

Sample output:

Day of the week → Wednesday
WED → 2

13. State if each boolean statement is true or false.

```
int a = -5, b = 8, c = 4;  
char alpha1 = 'X', alpha2 = 'B', alpha3 = 'K';
```

- (a) $(a \geq 0) \parallel (2 * c < 10)$ _____
- (b) $(c < 2 * a + b) \&\& (8 \% 3 == 2)$ _____
- (c) $(b \% 4 == 0) \&\& (b > c) \&\& (a < c)$ _____
- (d) $(b / c \% 2 != 0) \parallel (a == c)$ _____
- (e) $(\text{alpha1} > \text{alpha3}) \parallel (\text{alpha2} \geq \text{alpha3})$ _____
- (f) $(\text{alpha1} == 'x') \parallel (\text{alpha3} != 'M')$ _____
- (g) $(2 * c != b) \&\& ((b - a) \% 3 == 0)$ _____

14. The following program is intended to generate three random decimal numbers and then arrange them in order. The program is partially done for you. Fill in the gaps to make it run successfully.

```
import java.util.Random; // Required to get random numbers  
class Exercise4_9 {  
    public static void main(String str[]) {  
        Random rand = new Random( );  
        float x = rand.nextFloat( );  
        System.out.println("x = " + x);  
        .....  
        if (x <= y && y <= z) System.out.println("x <= y <= z");  
        .....  
    }  
}
```